Claims

1. Wave power assembly comprising a hull (3) and a linear electric generator (5), the rotor (7) of which by means of connection means (4) is connected to the hull (3) and the stator (6) of which is arranged to be anchored at a sea/lake bottom (1), **characterized in** that the generator (5) is provided with an electromechanic damping means in order to keep the pulsations of the axial force exerted by the stator (6) on the rotor (7) at a relatively low level, which damping means (12,13,14) comprises geometric arrangement adapted herefor of at least some one of the stator winding (2) the stator slots (13) and the rotor magnets (14).

2. Wave power assembly according to claim 1, **characterized in** that the stator comprises multiphase winding and that the electromechanic damping means consists of the stator winding comprising fractional slot winding (13).

3. Wave power assembly according to claim 2, **characterized in** that the stator (6) comprises 3-phase winding.

4. Wave power assembly according to claim 2 or 3, **characterized in** that the fractional slot winding (13) has a winding factor that is >1.

5. Wave power assembly according to claim 2 or 3, **characterized in** that the fractional slot winding (13) has a winding factor that is <1.

6. Wave power assembly according to any one of claims 1–5, **characterized in** that the stator comprises a plurality of stator packs (6a–6d) evenly distributed around the rotor and that each stator pack (6a–6d) has a winding (13) that comprises fractional slot winding (13).

7. Wave power assembly according to any one of claims 1–6, **characterized in** that the electromagnetic damping means comprises that at least some of the poles (14) of the rotor and/or some of the winding slots (13) of the stator are oriented obliquely in relation to a plane perpendicular to the direction of motion of the rotor (7).

8. Wave power assembly according to claim 7, **characterized in** that said poles (14) comprise magnets (114a–114c) of an elongate shape having a longitudinal axis that forms an angle to a plane perpendicular to the direction of motion of the rotor (7).

9. Wave power assembly according to claim 7 or 8, **characterized in** that each of said poles (14) comprises a group of a plurality of magnets (141a–141d), which magnets are axially displaced in relation to each other.

10. Wave power assembly according to any one of claims 7–9, **characterized in** that each of said winding slots (13a–13c) forms an angle to a plane perpendicular to the direction of motion of the rotor (7).

11. Wave power assembly according to any one of claims 1–10, **characterized in** that the rotor (7) is permanent magnetic.

12. Wave power plant **characterized in** that it comprises a plurality of wave power assemblies (20a–20c) according to any one of claims 1–11.

13. Use of a wave power assembly according to any one of claims 1–11 in order to generate electric energy.

14. Method in order to generate electric energy **characterized in** that the electric energy is generated by means of one or more wave power assemblies according to any one of claims 1–11.